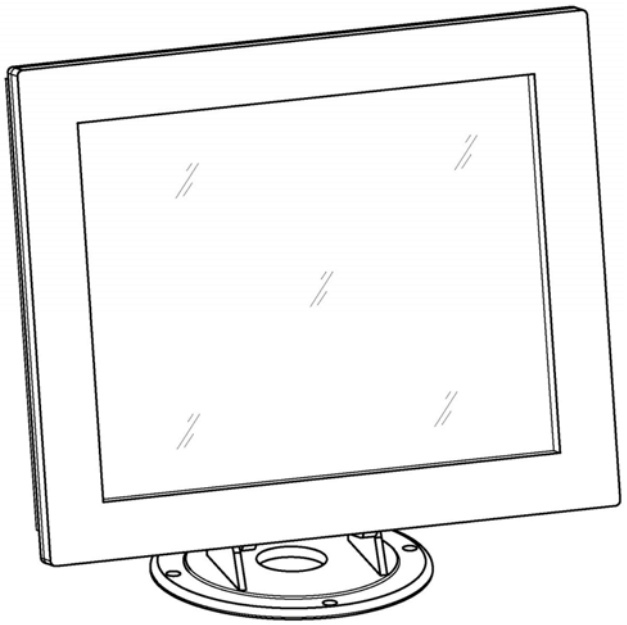
Ex-mark : Exd Ⅱ BT6 / DIP A21 TA, T6

ATEX *Certificate :* CNEx06.1580

License : XK06-123-00251

MANUAL BOOK



Veilux SVEX-171 Explosion Proof Monitor

Safety Notes

1. Installation

„ Please install under required environment

„ Ensure stable and reliable mounting in case camera be damaged

„ Ensure supply power same as nameplate marked before equipment being powered

„ Do not open the flameproof joint and enclosure under humid atmosphere. Because of excellent tightness of the equipment, framing member may rusts after humid air enters flameproof, humidity could not go outside

„ Connect the cables correctly under the demand of manual book, and press tighten nut.

2. Maintenance

„ Please shut off before maintenance and repair

„ Pay attention to the flameproof joint while disassembly and assembly

3. Environmental protection

„ The products contain spare parts which may pollute the environment, for example: PCB, electric component, plastic goods, lubricating grease and so on. Please collect and control the pollution sources when the equipment is maintained and scrapped. Don’t discard it but pass it to environmental department, in case it will influence the environment.

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1. Brief

YHJ-171Ex-proof displayer is new generation ex-proof monitor equipment. It changes the condition of terminal display equipment only be set in the control room. It can offer the customers the clear monitor picture in the dangerous ex-proof area. At the same time, it can enhance the flexibility of the system setting. SVEX-151 adapts advanced manufacturing process. With the help of mature quality, the quality and function of products are leading position.

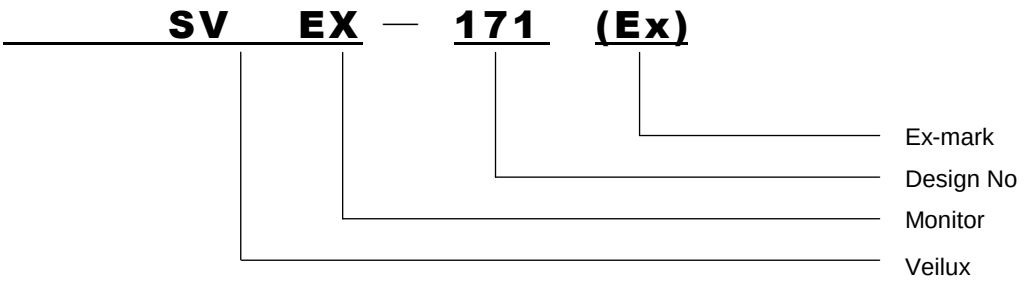
SVEX-151 Ex-proof monitor has the characters of small in size, light in weight, convenient in shipment. The various connections will make flexible application.

Strictly according to European Directive EC/94/9 and EN50014, Standards of GB3836.1-2000 GB3836.1—2000 Electrical apparatus for explosive atmosphere: General requirements, GB3836.2-2000 Electrical apparatus for explosive atmosphere: Flameproof 'd' and GB12476.1-2000 Electrical apparatus for explosive dust: Using enclosure and limiting surface temperature for protecting electrical apparatus Chapter 1: Technical requirements. The housing is made of stainless steel, Ip65.

High quality LCD panel is installed inner monitor, it can offer 1280 x1024 resolution ratio and display picture. Quick response displays walking Graphic well. TCO'03 keeps the highest safety and human engineering standards.

2. Technical data

2.1 Type Code



2.2 Certificate

Ex-marking	Exd Ⅱ BT6 / DIP A21 TA, T6
Ex Certificate	CNEx06.1580
ATEX Certificate	XK06-123-00251

2.3 Electrical

Input Voltage	100~240VAC, 50/60Hz
Consumed power	30 W（typical value）
Electric connection	
Power	3-core power cable
Signal input	Support only one when two methods appear
RGB imitate input	15 needles D-SUB
Video input	BNC pin

2.4 Technical data

Panel type	TFT LCD Display
area	17 inch diagonal
Pixel density	0.264 x 0.264 mm
Best resolution ratio	1280 x 1024 @ 60Hz
Available area	337.9 x 270.3 mm
Color	16,770,000
Tilt refresh rate	56Hz ~ 76Hz
Pan refresh rate	30KHz ~ 83KHz
Bandwidth	140MHz
Input impedance	
Video	75Ω
sync signal	2200Ω
Input signal level	700mVp-p
Synchronization input signal	Separate synchronization signal / Compose synchronization signal / Green signal
Synchronization signal pole	Plus-minus pole
Contrast corner peak value	180°

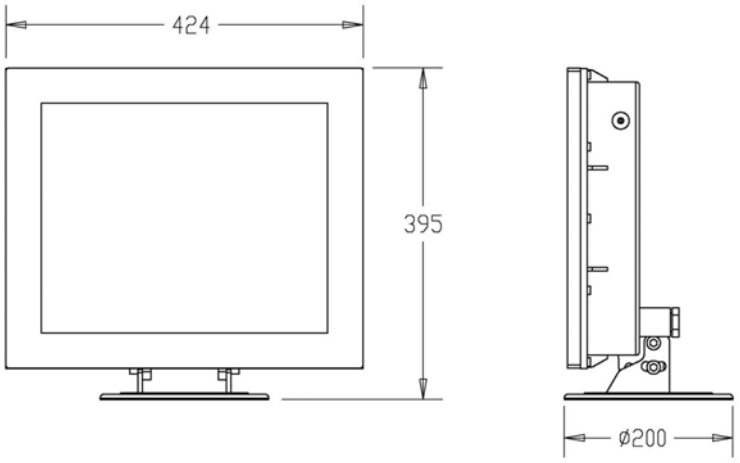
2.5 Mechanical

Protection	IP65
Material	304
Weight	25Kg
Dimension	395(H) x 424(W) x 200(D) mm
Len size	384 x 316 mm
Glass thickness	12mm
Inner cubage	3L
Outlet hole quantity	2
Outlet hole screw thread size	G-3/4”

2.6 Environmental

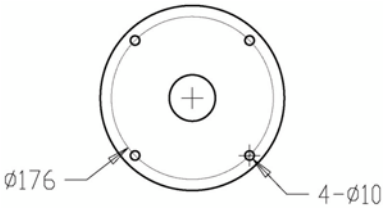
Air Pressure	86～106KPa
Environment Temperature	
Working	0℃~+40℃
Storage	-20℃~+60℃
Relative Humidity	U95%RH(+25℃)

2.7 Dimension



1. SVEX-171 Ex-proof displayer dimension

2.8 Installation Size

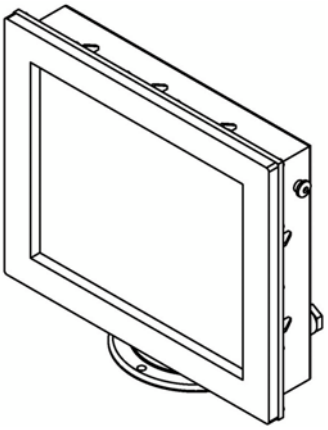


2. **Displayer fixed hole**

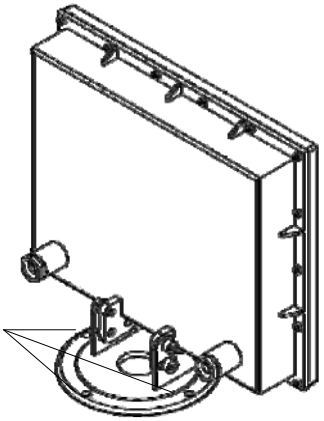
3. Installation

3.1 Desktop installation

SVEX-171Ex-proof displayer can be used corresponding to YHIC ex-proof IPC. It also can be used as a monitor to watch video signal. It usually is set on the table directly. Lamp stand is also fixed with bolt.

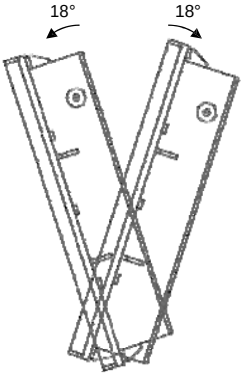


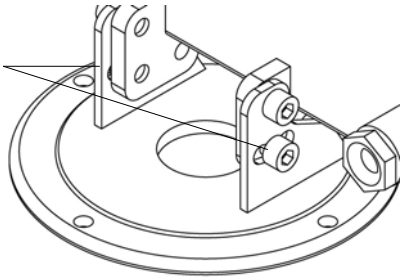
3. **Displayer can be set on the table directly.**



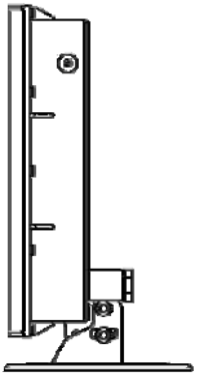
4. **Fix the lamp stand with bolt.**

Adjust screen angel according watching angel. Screen can be adjusted Tilt ±18°





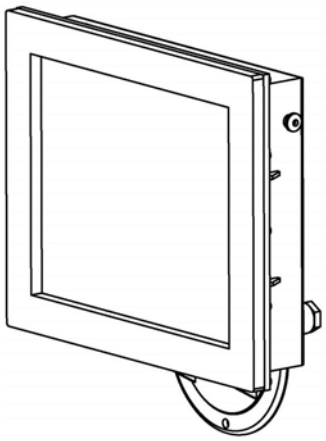
5. Loosen two bolts to adjust



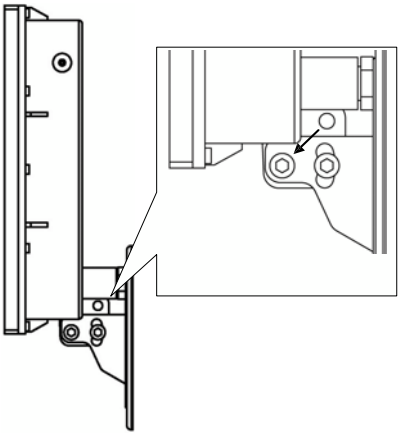
6. Adjust angel on tilt direction

3.2 Wall Mount Installation

In some occasions, we can use wall mount installation to save room. If we adjust the combination of lamp stand, we can achieve the aim. Screen can be adjusted Tilt ±18° when wall mount installation.



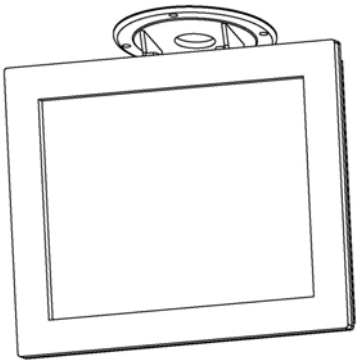
7. Wall mount installation



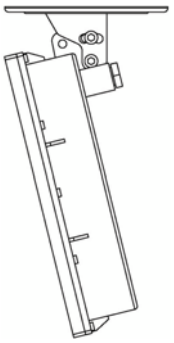
8. Lamp stand is fixed to the wall with bolt

3.3 Hoisting

We can fix monitor bottom to the ceiling. With the help of software, overturn the picture with main engine. Then hoisting is achieved.



9. Lamp stand is fixed to the ceiling with bolt



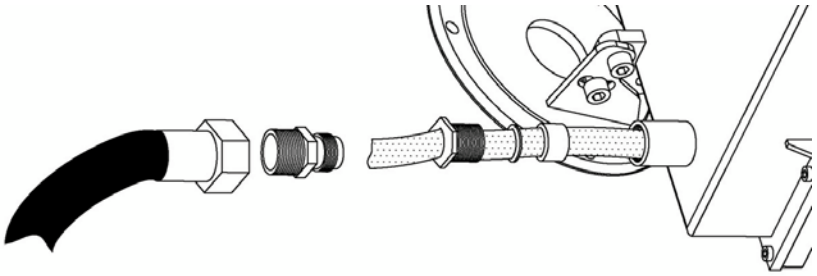
10. Adjust screen angel when hoisting

3.4 Cable Treatment

SVEX-171 Ex-proof displayer is attached a power cable and a VGA signal cable (or a coaxial cable). Ensure the corresponding ex-proof flexibility tube reach the demand of ex-proof before leave factory.

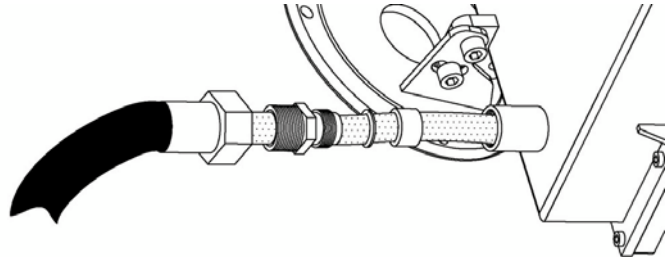
3.4.1 Use Ex-proof Flexibility Tube

a. As Picture 11, turn on the tighten nut behind the back of the displayer. Turn on the screw thread connector corresponding to ex-proof flexibility tube.



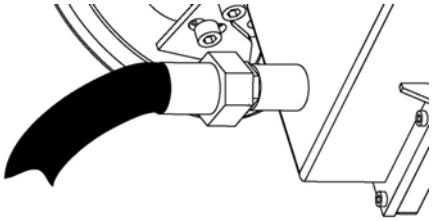
11.

b. As picture 12, take down press tighten nut, keep standard configuration gasket and rubber ring (or use the spare parts). Sheathe screw thread connector and ex-proof flexibility tube.



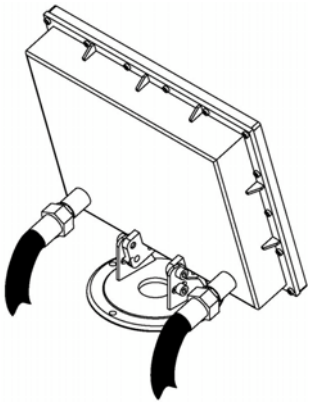
12.

c. As Picture 13, firstly turn tight the screw connection head and then tight the Ex-proof Flexibility Tube.



13.

d. As picture 14, the design sketch after installation.



14. The design sketch after install ex-proof flexibility

3.4.2 Connect power cable

Power cable is a 3-core cable; it must be attached ex-proof junction box when application. Connect cable in the junction box. The color of the cable is defined as following:

1. Power cable definition

Name	Power cable		
Function	Live line	Null line	Earth line
Color	Brown	Blue	Color

3.4.3 Connect signal cable

SVEX-171has two input ways, and only one is supported when leave factory. When use video input, the product lead in a coaxial line. It needs to avoid BNC pin. When use VGA input, SVEX-171lead in a VGA cable.

Standard VGA cable is 15-core screening cable. Because of output RGB signal is weak, it is easy to be influenced. It is not suit to transfer foe a long distance. A VGA pin will be made with the method of welding when application. Please pay attention to the operational tools. Professional soldering station is recommended to use. Power off soldering iron when welding.

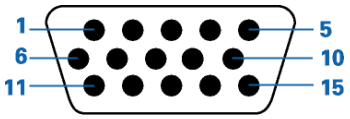


图 **15. 15 contact pin D connector**

表 **2.VGAcable definition**

Foot No	Function definition	Corresponding cable color
1	Red video input	Pink（screening，thick）
2	Green video input/SOG	Dark（screening，thick）
3	Blue video input	Cambridge blue（screening，thick）
4	SENSE（landing）	Black
5	Signal line test（landing）	White
6	Red video live line	Metal wire（screening）
7	Green video live line	Metal wire（screening）
8	Blue video live line	Metal wire（screening）
9	+5V	Brown
10	Logic live line	Red
11	Landing	Yellow
12	In tandem data line（SDA）	Orange
13	Pan synchronization /Tilt and pan synchronization	Light green
14	（VCLK for DDC）	Blue
15	（SCL）	Purple

Notice：

„ The above color definition is limited to the attached cable when leave factory. If user set himself, check color definition again to avoid breakdown.

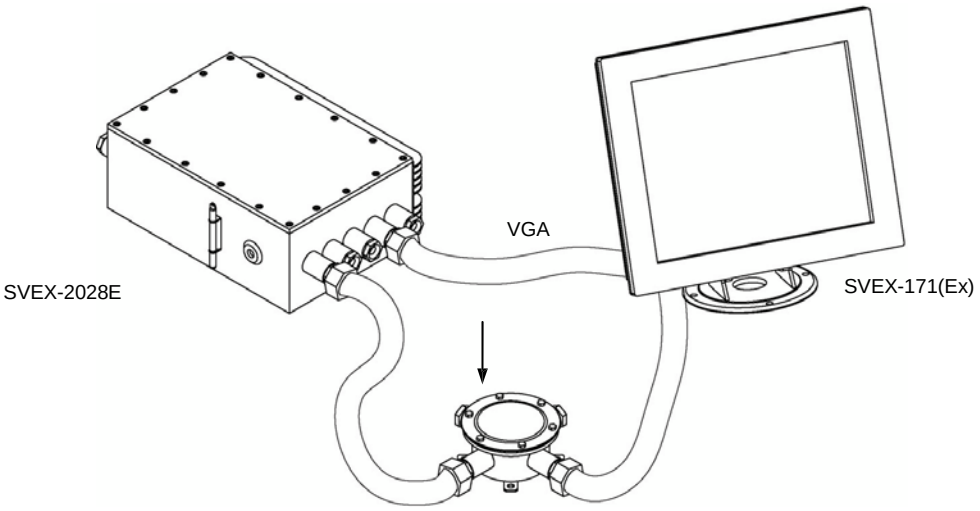
„ Cable external diameter should match to seal rubber inner diameter. Ensure, seal rubber ring and cable, seal rubber ring and lead in equipment interval reaches the demand of ex-proof after tighten nut. The demand of cable external diameter as following:

3. The demand of cable external diameter size

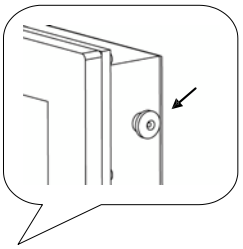
seal ring inner hole diameter （mm）	Cable minimum diameter （mm）
Φ6	≥Φ5.5
Φ8	≥Φ7.5

4. Application

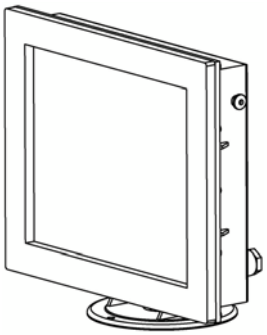
4.1 System Connection



4.2 Power on



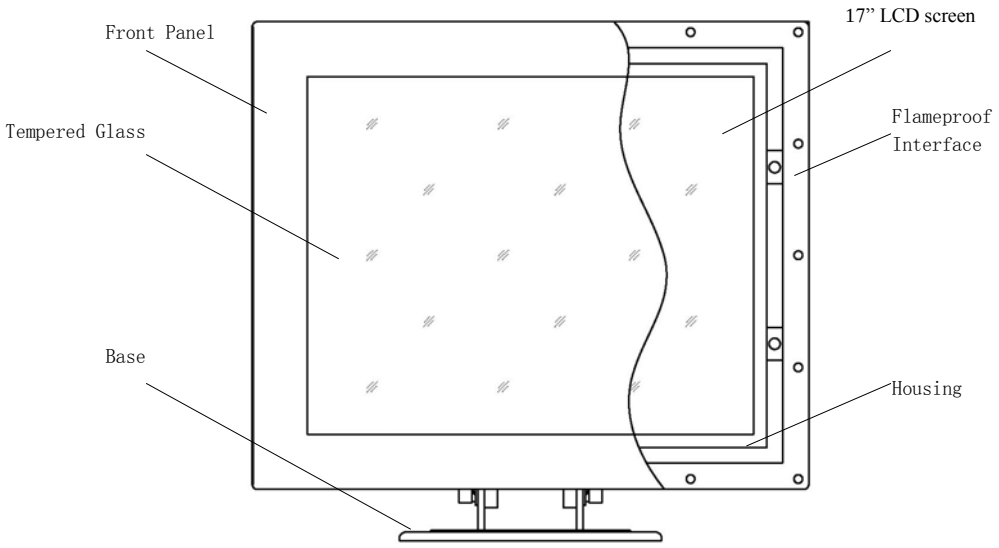
Press the switch lightly and the displayer enters the working condition. The switch can be auto locked press it if half upspring condition is power on,
If whole upspring condition is power off.



17. Power On/Off switch position

5. Flameproof structure

- Completely consider the explosive air getting into ex-proof structure, which may lead to explosion because of some reason and to confirm and ensure camera explosion proof performance based on its structure gap, length and max temperature it will get to.
- Enclosure shall burden water pressure testing for 1.0Mpa for 10~12 seconds without leakage as pass, which is ordered in GB3836.2-2000.
- Camera surface temperature max shall not over 80℃ while it is working.
- The lead to equipment is with the method of turn tight the screw.
- Window glass adopts steel glass to burden Impact and Heat change testing.
- Window glass adopts steel glass to burden Impact and Heat change testing.



18. Flameproof joint position picture

6. **Trouble shooting**

Problems	Reason	Method	Remarks
No image	Power off	Replace fuse	Do it oneself
		Check power line	Do it oneself
	Signal line off	Check signal line and pin	Do it oneself
Interference, double image	Signal line broken	Check signal line	Do it oneself
	Interference appears in the line	Look up interference source	Do it oneself
	Transfer distance is too long	Signal transfer is less than 15 meters	Do it oneself
Display color is unusual	Pin connection is not good.	Check pin and receptacle	Do it oneself
	Software set wrong	Start software to adjust display effect	Do it oneself
Picture overturn			
Resolution ratio is too low	Resolution ratio set wrong	Adjust Resolution ratio again	Do it oneself

7. **Shipment and storage**

After package, without rain or snow fall directly to product, shipment could do by air or sea and store for one year under the environment of -20℃~+60, humidity >90%.

8. **Guarantee**

For any camera produced by Veilux, we promise a one year to repair warranty.

During Guarantee period, we supply free service except following situations:

- „ User does not operate as manual book requires
- „ User un-install the whole product by themselves
- „ Lightning or Act of God

If there are additional agreements between Veilux and buyer, then agreements shall be strictly done.

9. **Statement**

- „ Veilux owns the final design changing and final specification rights and no

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